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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,183	11/07/2001	Daniel L. Gysling	CC-0124	7761

7590 11/25/2003

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EXAMINER	
KWOK, HELEN C	

ART UNIT	PAPER NUMBER
2856	

DATE MAILED: 11/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/010,183	GYSLING, DANIEL L.	
	Examiner	Art Unit	
	Helen C. Kwok	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2 and 4-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *10*.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-2 and 4-25 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3-9 and 14-17 (amended claims) of copending Application No. 10/011605 (Gysling). Although the conflicting claims are

not identical, they are not patentably distinct from each other because all of the limitations in the instant Application are claimed in the copending Application identified above. Hence, it would have been obvious to a person of ordinary skill in the art to have readily recognize the advantages and desirability of combining these claimed features in the copending Application to derive the presently claimed invention. Therefore, the claims in the instant Application are not patentably distinct from the claims of the copending Application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 5, 10-13, 15-17 and 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,719,329 (Jepson et al.).

With regards to claims 1, 2, 5, Jepson et al. discloses an ultrasonic measuring system and method comprising, as illustrated in Figures 1-4, a first speed sound meter 1-8 (i.e. pressure sensors) coupled to the outside of a first section 10a of a pipe 10 having a first compliancy for

determining a first effective speed of sound; a second speed sound meter 1'-8' (i.e. pressure sensors) coupled to the outside of a second section 10b of the pipe having a second compliancy for determining a second effective speed of sound; a signal processor 31 for determining the density of the fluid mixture flowing in the pipe from the first and second effective speeds of sounds; and a control device 30,31 for receiving the density signal to control a parameter to a predetermined level based on the density signal. (See, column 3, line 64 to column 10, line 48).

With regards to claims 10-13, 15-17 and 22-25, the claims are commensurate in scope with the above claims and are rejected for the same reasons as set forth above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 4, 6-8 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,719,329 (Jepson et al.) in view of U.S. Patent 6,354,147 (Gysling et al.).

With regards to claims 4, 6-8 and 18-19, Jepson et al. does not disclose the claimed features as specified in these claims. Gysling et al. discloses a fluid parameter measurement comprising, as illustrated in Figures 1-40, a housing 410 positioned around first and second

sound speed meters 14,16,18 which can be of fiber optic based sound speed meter. (See, column 20, lines 20-64). It would have been obvious to a person of ordinary skill at the time of invention to have readily recognize the advantages and desirability of employing the features as suggested by Gysling et al. to the device of Jepson et al. since using fiber optic based sound speed meter would not have alter the operation and/or performance of the apparatus, namely to measure density and to provide housing around the sensors of Jepson et al. would provide protection to the sensors from external interferences. Furthermore, using other dimensions (i.e. shape) of the cross sectional sensing regions of the pipe, like non-circular in lieu of circular, can be used without departing from the scope of the invention and is not necessarily limited to such dimensions.

7. Claims 9, 14 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,719,329 (Jepson et al.) in view of U.S. Patent 6,442,996 (Thurston et al.).

With regards to claim 9, 14 and 20-21, Jepson et al. does not teach an input line positioned between the first and second regions to provide a known quantity of a known substance into the fluid. Thurston et al. discloses an apparatus having an inlet line 6 positioned between sensors 10,12 to supply a known quantity of a known substance into the chamber. (See, column 1, line 6, line 2, line 14). It would have been obvious to a person of ordinary skill in the art at the time of inventing to have readily recognize the advantages and desirability of employing an input line as suggested by Thurston et al. to the device of Jepson et al. since this is

well known in the art to provide an input line to supply a known substance into the pipe to change the characteristics and properties of the fluid for calculation and results.

Response to Amendment

8. Applicant's arguments with respect to claims 1-2 and 4-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen Kwok whose telephone number is (703) 308-8149.

Helen C. Kwok
Art Unit 2856

hck
November 21, 2003